

## LISTING OF CLAIMS

1. (currently amended) An isolated p42 nucleic acid encoding a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, wherein said p42 nucleic acid is preferentially recognized by an *Agrobacterium*-mediated plant expression system thereby resulting in increased translation of the mRNA transcribed from said p42 nucleic acid wherein said nucleic acid comprises a nucleic acid which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3.

2. (currently amended) The nucleic acid of Claim 1, wherein ~~the sequence of said isolated p42 nucleic acid has been modified to remove potential poly-adenylation sequences, cryptic intron splice sites and RNA instability sequences, thereby resulting in enhanced RNA transcription and stability~~ in a tobacco plant host cell.

3. (canceled)

4. (currently amended) The isolated p42 nucleic acid of ~~Claim 3~~ Claim 1 comprising the ~~nucleotide sequences from 1 through about 1149 of~~ nucleic acid sequence of SEQ ID NO: 3.

5. (currently amended) An *Agrobacterium*-mediated plant expression system for the production of a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, said system comprising a DNA construct consisting of operatively linked DNA coding for nucleic acid encoding a modified T-region but no vir-region, wherein said modified T-region comprises naturally occurring border sequences consisting of about 23 nucleotides at the extremities of said modified T-region, and wherein the p42 nucleic acid of Claim 1, the p42 nucleic acid of Claim 2, or the NtMSP1.42C nucleic acid of Claim 3, is flanked by said border sequences and wherein said modified T-region further comprises a nucleic acid which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3.

6-9. (canceled)

10. (currently amended) A method for production of a p42 polypeptide, comprising the steps of:

- (a) introducing an *Agrobacterium* strain into a plant cell wherein said *Agrobacterium* strain comprises at least one plasmid ~~having~~ comprising the vir-region of a tumor-inducing plasmid but having ~~virtually~~ no T-region, and at least one other plasmid comprising the modified T-region of Claim 5 but having no vir-region, wherein said plant cell becomes transformed; and
- (b) extracting said p42 polypeptide from said transformed plant cell.

11. (canceled)

12. (original) The method of Claim 10 wherein said *Agrobacterium* strain is *Agrobacterium tumefaciens* strain LBA4404.

13-16. (canceled)

17. (new) The isolated p42 nucleic acid of Claim 1 comprising the nucleic acid sequence of SEQ ID NO: 1.

18. (new) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region comprises the nucleic acid sequence of SEQ ID NO: 1.

19. (new) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region comprises the nucleic acid sequence of SEQ ID NO: 3.